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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,815	05/10/2001	Russell R. Graze, JR.	98-281	5492

719 7590 08/14/2003

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PEORIA, IL 616296490

EXAMINER

RAEVIS, ROBERT R

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/852,815

Applicant(s)

GRAZE,, RUSSELL R.

Examiner

Robert R. Raevis

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-24 is/are allowed.
- 6) ☒ Claim(s) 1-3, 13-15 and 25 is/are rejected.
- 7) ☒ Claim(s) 4-12 (allowable material once written into indep format) is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 28 July 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over d'Appollonia et al.

d'Appollonia et al teach (Figure 1) a gas sampling system, including: diluters D1, D2 arranged in a fluidly serial manner; source 100 of dilution air fluidically connected to each of the diluters to supply gas so as to supply diluting gas into each of the diluters such that the diluting gas is supplied into the gas stream present within each of the diluters so as to progressively dilute the gas stream as the stream flows through the plurality of serially arranged diluters; and sampling apparatus U1, U2 fluidically connected to each of the diluters for obtaining and analyzing a sample of the diluted gas stream present with each one of the diluters.

d'Appollonia does not state that the inert gas is air, and the written specification does not state that the diluters are along an axial extent.

As to claim 1; while d'Appollonia states that the gas is "*typically* an inert gas such as nitrogen or argon" (italics added, col. 2, line 60), it is known to use air to dilute samples of gas to be analyzed. Also, the diluters D1 and D2 are arranged "along an axial extent" because either (1) they are along the same fluid axis, as defined by the lines directly connecting D1 and D2 that includes q11, or (2) D1 and D2 (along with the remaining diluters) appear to be vertically aligned along the same axis in Fig. 1.

As to claims 2 and 3; it is known to dilute sample streams containing particles for particle analysis, suggestive of use of d'Appollonia's system to provide a system to calibrate any known particle sensing apparatus.

2. Claims 13-15, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over d'Appollonia et al in view of Graze, Jr.

Comments that exist above regarding claims 1-3 similarly apply here.

As to claims 13 and 25, it is known to dilute sample streams containing particles for particle analysis, suggestive of use of d'Appollonia's system to provide a system to calibrate any known particle sensing apparatus. In addition, note that Graze, Jr. suggests that exhaust gas is commonly analyzed for content, suggestive of use of an exhaust gas particle analyzers in d'Appollonia.

3. As to the REMARKS filed 7-28-03, please consider the following:

As to p. 10, line 2 "along an axial extent", please look at Figure 1 of d'Appollonia, and follow the fluid passage from A to M1 to D1 to M2 to TS1 to d1 to L11 to D2 or M3 to TS2 to d2. This is a single fluid passage in series. This single passage has a fluid axis, and the fluid passes through that axis. The diluters D1 and D2 are along that same passage, and thus are along that same axis.

It was noted that Applicant did not challenge the "known" (p. 3, lines 6 and 11, of the Office Action of 4-22-03), so the Undersigned was not compelled to provide references. Regardless, please note that Graze, Jr does provide support for both the use of "diluent air" (col. 1, line 11) in analyzer usage, and (col. 1, lines 5-12) dilution of sample streams containing particles for particle analysis. In the event of an Appeal, Applicants invited to address all comments/art in their entirety.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Raevis whose telephone number is (703) 305-4919. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Raevis

RAEVIS

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